CLAIMS

1.. A method for controlling the program of a washing machine, comprising the recording of the amount of water supplied to the tub of the washing machine, characterised in that it comprises the following steps:

-   assessing the amount of free water present in the tub (T);

-   assessing the amount of water absorbed by the load by subtracting the amount of free water from the amount of water supplied to the tub (T);

-   estimating a specific absorption of the load based on the water absorbed and on free water,

-   calculating a load equivalent based on the specific absorption and on the amount of water absorbed by the load, such load equivalent being related to the load in the machine and being used for controlling the program thereof.

2. A method according to claim 1, characterised in that it further comprises the steps of:

-   assessing the difference of water levels in predetermined time intervals,

-   predicting future levels of water based on the above assessed differences, such future levels being directly related to predicted amount of free water;

-   estimating a predicted specific water absorption based on predicted amounts of free water,

-   calculating predicted load equivalents based on such predicted future amounts of free water and said predicted specific water absorption (SA), and

-   supplying an amount of water to the tub based on the above predicted load equivalents.

3. A method according to claim 1 or 2, characterised in that it further comprises the step of checking if the total amount of water supplied to the tub is higher than a predetermined value, and the step of alerting the user accordingly.

4. A method according to claim 1 or 2, characterised in that it comprises the following steps, carried out before a washing cycle is started:

-   filling a known water amount to the tub (T),

-   measuring the corresponding water level,

storing the difference value between a pressure reference value and the above measured value, and

using the stored value for compensating the measure of the free water amount.

5.   A method according to claim 1 or 2, in which at least one spinning step is carried out, characterised in that the increase of speed vs. time for reaching a final spinning speed is selected according to the water level measured, such increase being lower when such water level is high.

6.   A method according to claim 5, the final spinning speed, is reached in two or more steps, characterised in that the time interval (t, t') between said steps is determined according to the measured water level, such time intervals being higher when the water level is high.

7.   Washing machine, having means (10) for determining the amount of water supplied to the machine, such means being connected to a central processor unit (13) of the machine, characterised in that it comprises a continuous water level sensor (12) connected to such central processor unit (13), this latter being adapted to assess the amount of free water present in the tub (T), to assess the amount of water absorbed by the load by subtracting the amount of free water from the amount of water supplied to the tub (T), to estimate a specific absorption of the load based on the water absorbed and on free water, and to calculate a load equivalent based on the specific absorption and on the amount of water absorbed by the load, such load equivalent being related to the load in the machine.

8.   Washing machine according to claim 3, characterised in that its central processor unit (13) is further capable of assessing the difference of water levels in predetermined time intervals, predicting future levels of water based on the above assessed differences, such future levels being directly related to predicted amount of free water, estimating a predicted specific water absorption based on predicted amounts of free water, calculating predicted load equivalents based on such predicted future amounts of free water and said predicted specific water absorption, and supplying an amount of water to the tub based on the above predicted load equivalents.

9.   Washing machine according to claim 7 or 8, characterised in that the central processor unit (13) is provided with an alarm system that informs

the user when the pressure value measured by the continuous water level sensor is not within a predetermined range of values.

10.　Washing machine according to claim 7 or 8, characterised in that the central processor unit (13) is able to sum a predetermined number of consecutive pressure difference values measured by the continuous water level sensor, an alarm information being provided when such sum is below a predetermined value.

11.　Washing machine according to claim 7 or 8, characterised in that the central processor unit (13) comprises an alarm system for detecting the trend of water level in the tub during washing and/or rinsing, the alarm system alerting the user when the decrease of water level vs. time is higher than a predetermined value, this condition being indicative of a water leakage.